

Southwest Partnership Project Economic Development Team

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Executive Summary

The Southwest Partnership has made significant progress in exploring the existing status of commercial development in their seven neighborhoods. This project will support this work using geospatial analysis and visualization to further the Southwest Partnership's economic development goals.

Data provided by the Southwest Partnership on existing businesses was geocoded and represented on a map of the seven neighborhoods and their immediate surroundings. The businesses in the Southwest Partnership area were categorized according to a display-friendly schema. The three main layers presented are vacant parcels with commercial and industrial zoning, business locations by category, and transit lines and stops. Major observations include the residential nature of most northern and southern neighborhoods, with the most concentrated and varied business activity in the central Hollins Market neighborhood and its borders. This neighborhood is also well-served by transit, is commercially zoned, and contains multiple vacant properties, suggesting its suitability for future business development.

The report concludes that geospatial portrayal of business locations and types can contribute to future economic development strategies in the Southwest Partnership. However, several further steps would help solidify the information base. More accurate and comprehensive business information with respect to operating status and confirmed type of business conducted at each location is necessary, likely by visual survey. Additionally, resident feedback about new businesses and locations will help validate the analysis presented here that summarized existing types, gaps, and possible locations for future enterprises. The user-friendly, online GIS format of the final map product should prove useful in both presenting the analysis to the Southwest Partnership and form a basis for future work.

Project Summary

This project contributes to the Southwest Partnership's economic development efforts by visualizing the location of current businesses in the area, arranging them by category in a relevant way, and determining the area's potential for future business development. Spatial analysis confirmed many of the existing goals, that is to create a walkable main street around the Hollins Market area due to its transit proximity, existing status as a destination for neighborhood residents, and vacant, appropriately-zoned properties. We concluded that user-friendly maps of this information along with further investigation to help augment somewhat incomplete data will continue to support efforts in an area with favorable conditions for economic development.

Economic Development Background

The Southwest Partnership's Vision Plan contains the following statement concerning commercial development: "Create a thriving "Main Street" environment around commercial corridors that provides amenities, services and job opportunities for the Southwest area; Create a "front door" for surrounding residential areas; Offer vibrant public space for community gatherings and interaction."

Despite disinvestment and vacancy issues, the Southwest Partnership neighborhoods have a strong sense of community, thriving local businesses and anchor institutions, and plenty of potential for revitalization. By identifying the current locations of area businesses and potential future locations can help determine neighborhood needs and opportunities for growth.

To move toward their economic development goal, the Southwest Partnership needs a clear and marketable appreciation for existing economic conditions. This will include an evaluation of the area's existing businesses that currently contribute to its economic viability, and what opportunities for future development this data provides.

This report is not just a geospatial analysis distribution gaps, but how these gaps in business types align with existing zoning restrictions, and which existing vacant parcels in the Southwest Partnership might be available for development. This is a complex issue that will benefit from future expert analysis and local input, but will also benefit from an initial look at current spatial data.

A successful economic development implementation strategy will provide amenities, services, and job opportunities for communities, create a positive “front door” for surrounding residential areas, and offer vibrant public space for public gatherings and interaction. This strategy will be accomplished by supporting existing businesses, recruiting new businesses, and implementing creative business development efforts. The vision is for an improved commercial environment that meets the needs of the seven surrounding communities, current and future residents, anchor institutions and their students, clientele and employees, and commuters and tourists who frequent the area.

Research Questions and Problem Areas

Where are existing businesses in the area?

An analysis of economic development for the Southwest Partnership calls for validated and comprehensive “as-is” mapping of existing businesses to draw conclusions and provide recommendations. It is necessary to also correctly characterize the type of business that the location represents. Part of this question is making sure that any categorization schema is relevant to the types of recommendations the Southwest Partnership would like to see emerge.

Do existing businesses satisfy the needs of residents?

Specifically, does the existing mix of businesses and products serve the basic day-to-day needs of Southwest Partnership residents? Does it satisfy the range of neighborhood services that are necessary or do residents need to make trips outside the area for purchases? The distribution of

support services and basic retail stores is considered even if the geographical size of the Southwest Partnership is generally walkable.

How accessible are area businesses?

Accessibility is not just a question of whether businesses are adequately distributed to meet the subsistence needs of the residents in the Partnership, but also pertains to providing access to workers and visitors coming into the neighborhoods, and to providing attractive opportunities for business development investors and entrepreneurs.

What is the potential for new commercial growth in the area?

There are multiple facets to this question: The analysis of existing business types, their locations, and how they satisfy the Partnership's economic goals. Are they businesses that provide income, jobs or are part of the Partnership's tax basis? These considerations help ensure that new growth supports a mix that will be successful over the long run.

Analysis Approach and Process

Variables and Sources

Business addresses: The Southwest Partnership provided a set of approximately 160 businesses identified through their contacts and through work in the neighborhoods.

Geolocator: We used a geolocator file provided during an in-class exercise.

Vacancies: Vacant lot data was used to determine possible future business sites. Data was provided, in point form, pre-geocoded, courtesy of Professor Liu via OpenBaltimore.

Parcel file: This property data was used in conjunction with vacancy data to show the size and shape of vacant properties. This data was made available to the class at the beginning of the project.

Neighborhood boundaries: This data was provided at the beginning of the project.

Zoning: The zoning layer was obtained from OpenBaltimore and used as a basis for determining where new development may be most possible.

Transit locations: Transit data was used to examine accessibility and its relationship to future business development, including bus and rail lines. This data was obtained via ArcGIS online.

Additional business data: Data on grocery store locations were provided by Professor Liu.

Process

The first step in analyzing existing businesses within the Southwest Baltimore area was to “clean” the provided data sheet with all listed business addresses. Additionally, a general business category was assigned to the different types of businesses, such as “Food” for fast food restaurants. The business type was by looking up the business names and addresses provided.

The existing zoning regulations were examined by using ArcMap to clip the Baltimore zoning shapefile by the Southwest Baltimore boundary file. Individual zoning category were extracted using the function “select by attributes” and “export data” to a shapefile. Then, the edited business addresses were geocoded. Any remaining unmatched addresses were due primarily to incomplete address information, which couldn’t be verified or completed through internet research.

Another important factor was the vacancy rate within Southwest Baltimore, examined in a shapefile provided by the course instructor. It included all the vacant parcels within the City of Baltimore. The vacant parcel map was clipped to the size of the neighborhood boundary. Also, parcels were “merged” to become a single polygon so that final data products could be uploaded to ArcGIS online, an online mapping tool that has a limited data volume capacity for shapefiles.

With the centerpiece of the analysis completed, the process could then define which spatial analyses would be helpful in assembling a more comprehensive picture of existing business activity within the Southwest Baltimore area. For this, three thematic maps focused on three different areas: food and grocery options, activities offered for residents and visitors, and services provided within the neighborhood. These focus areas were chosen because they highlighted major factors that contribute to a livable neighborhood and economically vibrant community that attracts visitors. Identifying gaps in these focus areas could indicate in which specific areas Southwest Baltimore can improve service coverage or have the potential for new business development.

The Partnership's business data was augmented by obtaining additional grocery store locations from Professor Liu. This shapefile was reduced in size, by using a one-mile buffer around the neighborhood boundary. It was then joined to the existing table of categorized businesses; so the resulting shapefile therefore also included grocery stores not presented in the business address list.

All spatial analysis was performed using ArcMap. However, for the different layers to be interactively displayed on a common map, all files were uploaded into ArcGIS online, creating the opportunity to switch between different thematic maps and spatial files. Thus, ArcGIS online was used to display the analysis products as well as map layout. The mapping style and icons were changed to make an easily comprehensible map. It also included a public transportation shapefile to show the area's accessibility.

There were some spatial analyses performed that were not included in this project either because they had no significant results or did not contribute to the topic of economic development. This is part of the initial trial and error phase of any spatial analysis project.

Results

The results present the spatial information in a user-friendly, web-based format that can be adapted to future project needs. This report includes some sample maps; the full extent of map information is available via link in the Appendix. The data was also aggregated into a table format to show how area businesses are distributed by category (see Table 1).

Table 1: Categories and Distribution of Business Types

Business type	# in type	% in type	Example businesses in this category
Bar and liquor	10	6.17	Bar, Liquor Store, Bar Restaurant, Corner Liquor and Services
Cultural	13	8.02	Memorial House, Museum, Performing Arts Theater, Puppet Theater, Ethnic Event Center, Ballroom, Golf Course
Education	6	3.71	Day Care, Library, Charter School, Academy
Grocery	10	6.17	Food Market, Deli and Grocery, Grocery Store
Nonprofit	6	3.71	Hollins House, Transition House, Religious Center
Other	6	3.71	Foundry, Food Processing, Unknowns
Other Food	5	3.08	Bakery, Corner Store, Carry-out
Restaurant	41	25.30	Restaurant, Café, Coffee Shop, Fast Food,
Retail	16	9.88	Furniture, Clothing, Beauty Supplies, Hardware, Shoes, Misc.-General Store
Services	49	30.25	Real Estate, Cleaning, Laundry, Roofing

The businesses were examined spatially to assess any patterns; then, all businesses were examined by neighborhood to observe any possible implications of each neighborhood's economic environment.

Grocery Stores



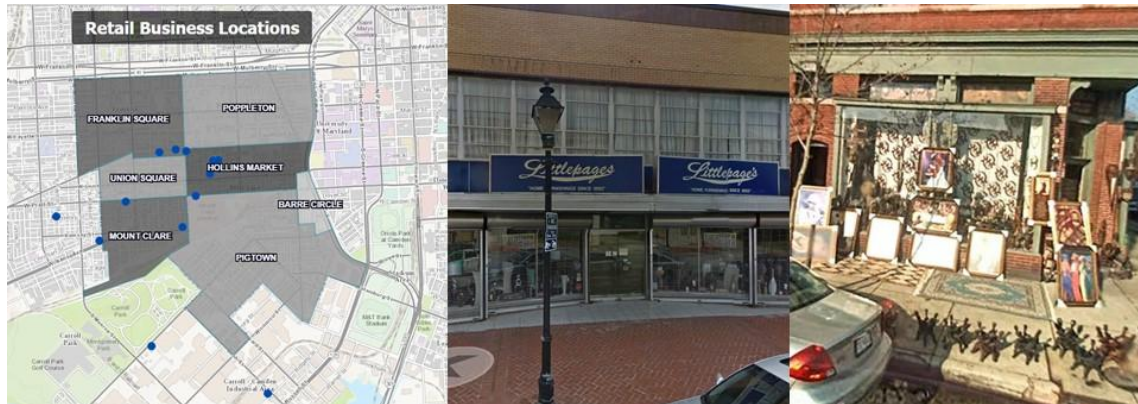
Grocery stores are a key category to address when considering the basic needs of neighborhood residents. They are unlikely to serve any visitors or regional needs, and so are directly related to neighborhood customers. This category includes varied types of establishments, small ethnic markets, convenience-food hybrid type stores, and larger full-service establishments. They appear fairly well-distributed throughout the area, but their ability to provide healthy and affordable food may vary depending on their size and offerings.

All Food Establishments



Analysis also considered grocery stores along with restaurants, businesses in the “other” category, which includes specialized providers like bakeries. Restaurants are more abundant, which is not a great indicator of healthy, affordable food availability, but restaurants can also be a source of attraction visitors and workers, and can provide employment for residents.

Retail



The area's retail stores are mostly small and specialized, and include hardware, clothing, and specialty gift shops. This category may require further assessment to determine its ability to meet neighborhood needs, but it is likely that the few specific shops are not able to provide the full range of products residents may require.

Services



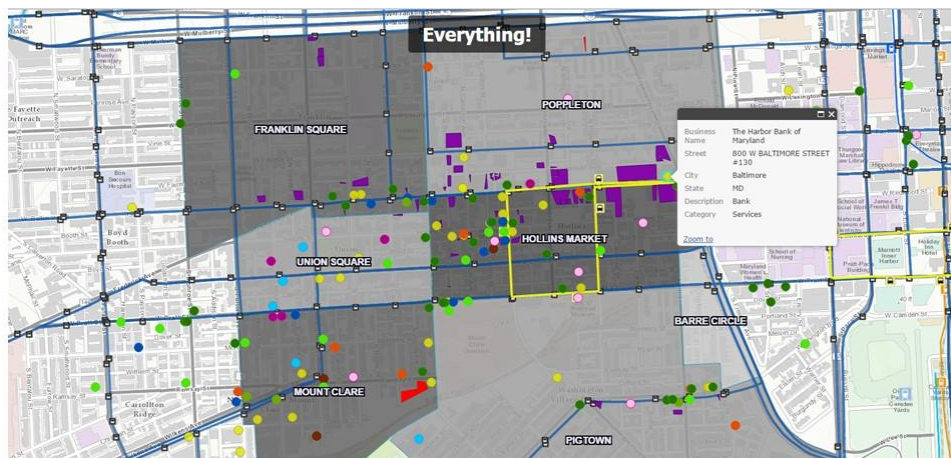
For clear visualization, this category is somewhat broad, and includes banks, automotive needs, medical services, and business services. Services are fairly abundant throughout the area, with the most density located centrally in Hollins Market. Like retail, this category of specialized establishments would need further verification to assess its fulfillment of neighborhood needs.

Cultural, Non-profit, Educational, and Miscellaneous



This collection of establishments shows that educational services like day care and private schools are clustered to the west, while cultural institutions such as museums and theaters are located mainly in the east. This suggests that the western neighborhoods are primarily residential and family-oriented, while the eastern areas can attract visitors from downtown, other areas of Baltimore, or from the larger region.

All Business Locations



The overall pattern of business locations shows significant clustering in the central Hollins Market neighborhood. This is likely due to the presence of the historic Hollins Market itself, and its identity as a source of commercial activity that is central to many of the surrounding residential areas. This is also where commercial zoning is currently located, vacant properties

are abundant, and multiple cross-town bus lines converge, suggesting potential sites for new business development. Given the relatively small market in the Southwest Partnership area, it makes sense to focus on Hollins Market as a destination for attracting establishments that will contribute to the local economy. Expanding businesses along the east side of Hollins Market and into parts of Poppleton, Barre Circle, and Pigtown would help connect these neighborhoods to surrounding communities and help them benefit from the City's downtown growth.

Recommendations and Conclusion

While the data was able to answer some research questions about business location, variety, accessibility, and growth potential, one of the main challenges in developing conclusions was the availability and quality of data.

Existing business data is a critical starting point in assessing economic development strategies, and a more accurate, up to date, and more comprehensive set of existing businesses will be essential to provide a basis for future action and to ensure that Partnership resources are commitments are based on the best-possible analysis.

Gathering this data will likely require eyes-on-the-street validation of online databases because .disparities among business data, Google street map views, internet business and social network data for business location, proper classification typing, and even actual existence were disappointingly common. The data as processed here provides a representative portrayal for planning future development paths, but not one that provides the level of certainty for final business decisions.

Business-type classifications are essential to evaluating the best current and future mix for the communities, but categorization that reflects the personal desires of the neighborhoods and the Partnership, unlike the best-guess estimates provided here, will essential for final business decisions. Getting Partnership-wide input, through either surveys or representative sampling,

would be invaluable for decisions about support residents' day-to-day needs. Survey questions and analysis might cover:

- How much of their shopping (and in what categories) do they do within the Southwest Partnership area and how much outside? (Is respondent age, income level, housing location, or employment status a factor?)
- What are the businesses they most frequently use in the Partnership area? How often? Is distance within the area a factor? Are there sufficient choices? (Is respondent age, income level, housing location, or employment status a factor?)
- What business(es) would they most likely use if they were available (or more accessible) within the Partnership area? (Is respondent age, income level, housing location, or employment status a factor?)

Even the retail market analyst producing the commercial development analysis for the Southwest Partnership Vision Plan acknowledged that there are unusual and unexpected variances in the Partnership area's retail market versus what academic research might suggest. A survey of residents, and if possible, one that includes workers employed within the Partnership area, would help determine if the following gaps are significant: Veterinarian/Pet Care Store, Pharmacy, Electronics Repair, Car Wash, Used Merchandise Store, Book/News store, Sewing, Piece Goods, Music Items Store, Tailor/Leather Repair, Office Supplies, Gas, Fuel Station, Bicycle Sale/Repair, Hobby, Toy, Gift, Novelty Store, Optical Goods.

Economic development at this scale often depends on larger forces, and so strategies must be adaptable to market changes, the relocation of businesses and people, infrastructure availability, and regulatory shifts. The larger goal of strengthening the area's economy may be achieved by smaller projects that require data tailored to their specific needs; static maps may not provide the most useful information moving forward.

The user-friendly and easily customized layout of this project's maps are a tool that would meet current needs and remain useful for future analysis of the Partnership area. The delivered GIS

structure and user-friendly app portraying compiled data should prove useful in both presenting the analysis to the Southwest Partnership and residents, and should form a structure to then take economic development efforts further.

Appendix

Map Links

Maps, in presentation format: <http://arcg.is/1I5zXks>

Interactive web app: <http://arcg.is/1IRh44J>

Map, editable by someone with an ArcGIS online account: <http://arcg.is/1MehcWP>

Data Sources

MD iMap. Maryland's mapping and GIS data portal.

<http://imap.maryland.gov/Pages/default.aspx>. Last accessed December 19.

Open Baltimore. Open data portal City of Baltimore. <https://data.baltimorecity.gov/>. Last accessed December 19.

Professor Chao Liu

Southwest Partnership